

Claims Amendments

1 – 13 (canceled)

14. (currently amended) A laminated core testing device to test a laminated core in a generator, comprising:

a field winding that lies in parallel with an axis of rotation of the generator and is connected to a high-voltage testing device that produces alternating current during a test to simulate an operational state of the generator; and

an infrared image detection device that is designed to detect infrared radiation during the simulated operational state of the generator; and

a-wherein the high-voltage testing device is configured to simulate the operational state of the generator by outputting a fundamental frequency and a power in single-phase form at an output voltage of at least 400 V that can be regulated, wherein the high-voltage testing device comprises a frequency converter for converting the fundamental frequency to a frequency that is greater than 50 Hz to energize the field winding at the greater frequency value and cause a thermal response indicative of at least one hot spot in the laminated core during the simulated operational state of the generator.

15. (cancelled).

16. (previously presented) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device has an input side which can be connected to a three-phase power supply.

17. (previously presented) The laminated core testing device as claimed in claim 16, wherein the three-phase power supply has a three-phase 400 V AC voltage.

18. (previously presented) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device makes available the electrical power at a frequency of greater than 400 Hz.

19. (previously presented) The laminated core testing device as claimed in claim 14, wherein the field winding comprises at least two lines.

20. (previously presented) The laminated core testing device as claimed in claim 14, wherein the high-voltage testing device is in the form of a transportable device.

21. (currently amended) A high-voltage testing device for testing a laminated core in a generator, comprising:

a single-phase output signal that can be regulated during a test to simulate an operational state of the generator; and

an output voltage of at least 400 V having a fundamental frequency, wherein the high-voltage testing device comprises a frequency converter for converting the fundamental frequency to a frequency that is greater than 50 Hz to simulate the operational state of the generator, wherein a field winding is energized at the greater frequency value to cause during the simulated operational state of the generator a thermal response indicative of at least one hot spot in the laminated core, wherein the thermal response is detected by an infrared image detection device configured to detect infrared radiation during the simulated operational state of the generator.

22. (cancelled)

23. (previously presented) The high-voltage testing device as claimed in claim 21, further comprising an input side that can be connected to a three-phase power supply.

24. (previously presented) The high-voltage testing device as claimed in claim 23, wherein the input side can be connected to a three-phase 400 V AC voltage.

25. (previously presented) The high-voltage testing device as claimed in claim 21, wherein electrical power at a frequency of greater than 400 Hz is made available.

26. (currently amended) A method for testing for faults in a laminated core of a generator, comprising:

producing alternating current via a high-voltage testing device during a test to simulate an operational state of the generator;

connecting the high-voltage testing device being connected during the simulated operational state of the generator to a field winding that lies in parallel with an axis of rotation of the generator;

detecting and recording infrared beams in the direction of the axis of rotation using an infrared image detection device;

making available power in a single phase form via ~~a~~the high-voltage testing device at a fundamental frequency and at an output voltage of at least 400 V that can be regulated;

converting the fundamental frequency to a frequency that is greater than 50 Hz;

energizing the field winding at the greater frequency value to cause a thermal response indicative of at least one hot spot in the laminated core; and

inspecting a detected infrared recording for said at least one hot spot obtained during the simulated operational state of the generator, which points said at least one hot spot pointing towards faults in the laminated core of the generator.